

AMENDMENTS TO THE SPECIFICATION

In the specification at page 1, after the title, please insert the following new paragraph:

RELATED APPLICATIONS

This application is a national stage application (under 35 U.S.C. 371) of PCT/EP2003/007877 filed July 18, 2003, which claims benefit of German application 102 34 287.3 filed July 26, 2002.

In the specification at page 18, line 39, please replace the paragraph which starts with “m) 5-methylthioribose” with the following amended paragraph:

m) 5-methylthioribose (MTR) kinases, with preference being given to using as nontoxic substance X substances such as 5-(trifluoromethyl)thioribose (MTR analog, “subversive substrate”) which is converted, via an unstable intermediate, into the toxic substance (Y) carbothionyl difluoride. The MTR kinase is a key enzyme of the methionine salvage pathway. Corresponding enzyme activities have been described in plants, bacteria and protozoa but not in mammals. MTR kinases of various species have been identified owing to defined sequence motifs (Sekowska A et al. (2001) BMC Microbiol 1:15[;]) <http://www.biomedcentral.com/1471-2180/1/15>). Corresponding sequences and the process of carrying out negative selection processes using, for example, 5-(trifluoromethyl)thioribose are known to the skilled worker and readily obtainable from the appropriate sequence database (e.g. GenBank) (Sekowska A et al. (2001) BMC Microbiol 1:15; Cornell KA et al. (1996) 317:285-290). The sequences, materials and processes disclosed in the context of said publications are hereby explicitly referred to.

In the specification at page 23, line 39, please replace the paragraph which starts with “The invention therefore” with the following amended paragraph:

The invention therefore further relates to double-stranded RNA molecules (dsRNA-Moleküle molecule) which, when introduced into a plant organism (or into a cell, tissue, organ or propagation material derived therefrom) cause the reduction of at least one marker protein. The double-stranded RNA molecule for reducing expression of a marker protein (MP-dsRNA) here preferably comprises

In the specification at page 34, line 47, please replace the paragraph which starts with "Preference is given to selecting" with the following amended paragraph:

Preference is given to selecting the DSB1 enzyme, with the knowledge of its specific recognition sequence, in such a way that it possesses, apart from the target recognition sequence, no further functional recognition regions in the genome of the target plant. Very particular preference is therefore given to Homing endonucleases (overview: Belfort M and Roberts RJ (1997) Nucleic Acids Res 25:3379-3388; Jasin M (1996) Trends Genet 12:224-228; Internet: <http://rebase.neb.com/rebase/rebase.homing.html> REBASE - The Restriction Enzyme Database; Roberts RJ and Macelis D (2001) Nucl Acids Res 29: 268-269). The latter fulfill said requirement, owing to their long recognition sequences. The sequences coding for Homing endonucleases of this kind may be isolated, for example, from the Chlamydomonas chromoplast genome (Tunnel M et al. (1993) J Mol Biol 232:446-467). Suitable Homing endonucleases are listed under the abovementioned internet address. Examples of Homing endonucleases which may be mentioned are those like F-SceI, F-SceII, F-SuvI, F-TevI, F-TevII, I-AmaI, I-AniI, I-CeuI, I-CeuAIIP, I-ChuI, I-CmoeI, I-CpaI, I-CpaII, I-CreI, I-CrepsbIP, I-CrepsbIIIP, I-CrepsbIIIP, I-CrepsbIVP, I-CsmI, I-CvuI, I-CvuAIP, I-DdiII, I-Dirl, I-Dmol, I-HspNIP, I-Llal, I-MsoI, I-NaaI, I-NanI, I-NclIP, I-NgrIP, I-NitI, I-NjaI, I-Nsp236IP, I-PakI, I-PboIP, I-PcuIP, I-PcuAI, I-PcuVI, I-PgrIP, I-PobIP, I-PorI, I-PorIIP, I-PpbIP, I-PpoI, I-SPBetaIP, I-ScaI, I-SceI, I-SceII, I-SceIII, I-SceIV, I-SceV, I-SceVI, I-SceVII, I-SexIP, I-SneIP, I-SpomCP, I-SpomIP, I-SpomIIP, I-SquIP, I-Ssp6803I, I-SthPhiJP, I-SthPhiST3P, I-SthPhiS3bP, I-TdeIP, I-TevI, I-TevII, I-TevIII, I-UarAP, I-UarHGPA1P, I-UarHGPA13P, I-VinIP, I-ZbiIP, PI-MtuI, PI-MtuHIP, PI-MtuHIIP, PI-PfuI, PI-PfuII, PI-PkoI, PI-PkoII, PI-PspI, PI-Rma43812IP, PI-SPBetaIP, PI-SceI, PI-TfuI, PI-TfuII, PI-ThyI, PI-TliI, PI-TliII. Preference is given here to those

Homing endonucleases whose gene sequences are already known, such as, for example, F-SceI, I-CeuI, I-ChuI, I-DmoI, I-CpaI, I-CpaII, I-CreI, I-CsmI, F-TevI, F-TevII, I-TevI, I-TevII, I-AniI, I-CvuI, I-LlaI, I-NanI, I-MsoI, I-NitI, I-NjaI, I-PakI, I-PorI, I-PpoI, I-ScaI, I-Ssp6803I, PI-PkoI, PI-PkoII, PI-PspI, PI-TfuI, PI-TliI.